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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/522,812	03/10/00	PATTERSON	J 00-001

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EXAMINER

LEE, B

ART UNIT	PAPER NUMBER
2736	2

DATE MAILED: 09/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/522,812	Applicant(s) PATTERSON, JENNIFER
Examiner	Art Unit	
Benjamin C. Lee	2736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

1) Responsive to communication(s) filed on 10 March 2000 .

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-30 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-30 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are objected to by the Examiner.

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
a) All b) Some * c) None of the CERTIFIED copies of the priority documents have been:
1. received.
2. received in Application No. (Series Code / Serial Number) _____.
3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s) _____
16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152)
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 20) Other: _____

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DETAILED ACTION

1. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2736.

Claim Status

2. **Claims 1-30** are pending in the application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim rejected under 35 U.S.C. 103(a) as being unpatentable over **Ha et al.** (US pat. #5,872,515) in view of **French** (US pat. #5,760,690).

1) In considering claim 1, **Ha et al.** disclosed the following claimed subject matter:

a) claimed method for causing an alarm to be generated in a portable computer

(Abstract) having a cover (3), a main computer body (1), a hinge (col. 5, lines 18-20) between

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said cover and said body, and an interrupt vector (inherent from col. 6, lines 1-14), said method comprising: detecting foldable closing of said cover relative to said body (switch 10); causing an interrupt to occur within said portable computer (col. 6, line 5); said interrupt causing branching control to a fixed address in said interrupt vector following said detecting (conventional interrupt handling of the interrupt function of col. 6, lines 1-14); and generating said alarm following said interrupt (col. 6, lines 4-8);

except:

b) the claimed wherein said alarm is an audible alarm generated by a speaker.

While **Ha et al.** teaches an alarm generated on a laptop computer without specifying further alarm detail, **French** teaches in the same laptop computer theft detection and alarm generation art the use of the computer speaker as the alarm generation output (14). In view of the teachings by **Ha et al.** and **French**, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the computer's own speaker can be used as the theft alarm generation output such as taught by **French** in a laptop computer theft alarm system such as taught by **Ha et al.** to make use of existing speaker without the need for additional audible alarm hardware to prevent additional hardware cost.

2) In considering claim 2, **Ha et al.** and **French** made obvious all of the claimed subject matter as in claim 1, whereby:

French teaches that the interrupt procedure as the result of theft detection, in addition to the alarm generation, can be multiple computer system function disabling features (col. 5, lines

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22-60). In view of the teachings by **Ha et al.** and **French**, it would have been obvious to one of ordinary skill in the art at the time of claimed invention that a computer system function selective disabling feature such as taught by **French** can be used with a laptop computer anti-theft system such as taught by **Ha et al.** so that unauthorized use of the stolen computer is prevented in addition to it being detected and alarm generated to provide added security to the computer contents. Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that said fixed address in said interrupt vector for interrupt handing can be assigned by a computer designer in a system such as taught by **Ha et al.** and **French**, such as through the conventional BIOS setup procedure or a well-known trapping of an interrupt (Applicant's admitted prior art on page 10, lines 1-5), so as to implement the intended capability of allowing any number of the computer function disabling feature to be selected.

3) In considering claims 3-11, **Ha et al.** and **French** made obvious all of the claimed subject matter as in claim 2, whereby:

a) the claimed said fixed address in said interrupt vector comprising an original address for branching control of said portable computer upon occurrence of said interrupt; a first instruction segment at said original address contained in said fixed address in said interrupt vector, control branching to said first instruction segment upon said interrupt; trapping said interrupt, whereby the trapping, which is by resetting said original address to an indirect address of said second address, occurs at boot time are met by the known interrupt handling and interrupt

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trapping operations as shown by Applicant's admitted prior art on page 8, line 16 to page 10, line 9;

c) the claimed second instruction segment located at a second address for causing said speaker to generate said alarm is met by the inherent executable instruction in the interrupt which directs the controller function of the alarm generation in **Ha et al.**

4) In considering claim 12, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claim 11, except:

--the claimed detecting whether said speaker is enabled.

The alarm generation is through the laptop computer speaker in the system taught by **Ha et al.** and **French**, whereby a conventional laptop computer has a user selectable speaker on/mute or enabled/disabled function. It would have been obvious to one of ordinary skill in the art at the time of the claimed invention that in order to allow in the intended function generating the alarm through the speaker when theft is detected in a system such as taught by **Ha et al.** and **French** wherein the speaker can selectively be muted, the status of the speaker should be detected and should it be disabled, the speaker should first be enabled via the same interrupt alarm generation function before the alarm generation through the speaker can commence.

5) In considering claim 13, **Ha et al.** and **French** made obvious all of the claimed subject matter as in claim 12, including:

--the claimed detecting whether said alarm is activated by an authorized user (steps S28 and S30 of **Ha et al.**).

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6) In considering claim 14, **Ha et al.** and **French** made obvious all of the claimed subject matter as in claim 13, wherein:

It has been well known that many laptop computer speaker volume controls are software-driven, so that if such is the case with the laptop computer having the system taught by **Ha et al.** and **French**, in which upon an alarm condition interrupt the CPU is locked until a correct password is input (col. 5, lines 38-43 of **French**), the computer internal components including the software-controlled speaker volume control can only be set or changed by the authorized user with a password unlocking the CPU.

7) In considering claim 15, **Ha et al.** and **French** made obvious all of the claimed subject matter as in claim 14, including:

--the claimed said authorized user may deactivate said alarm (S31-S34 of **Ha et al.**).

8) In considering claims 16-17, **Ha et al.** and **French** made obvious all of the claimed subject matter as in claim 15, including:

--the claimed said authorized user may select one of a plurality of passwords/hot keys for deactivating said alarm (col. 8, lines 5-10 of **Ha et al.**).

9) In considering claim 18, **Ha et al.** and **French** made obvious all of the claimed subject matter as in claim 14, including:

--the claimed said authorized user may activate said alarm (Figs. 4A and 7 of **Ha et al.**, when the authorized user does not use the hot keys and step S103 determines an alarm condition; or step S30).

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10) In considering claims 19-20, **Ha et al.** and **French** made obvious all of the claimed subject matter as in claim 18, except:

--the claimed said authorized user may select one of a plurality of hot-keys/passwords for activating said alarm.

Ha et al. teaches that the authorized user may select one of a plurality of hot-keys for bypassing the alarm so the alarm will not be activated the first place, or select one of a plurality of passwords for deactivating said alarm once the alarm has been activated (col. 7, lines 26-45) and also teaches use of a BIOS setup modifying section 70 for changing the on/off state of the alarm function as well as the passwords and hot-keys (col. 8, lines 3-10 of). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the alarm on/off or activation/deactivation modification function that is done in the BIOS setup in a system such as taught by **Ha et al.** and **French** can be additionally or alternatively be designed to be implemented by hot-keys and/or passwords without unexpected results.

11) In considering claim 21, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claims 1 and 3-11, except:

--the claimed polling the status location indicating cover closing.

However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the step of determining whether the cover is closed by checking on the status location of the on/off state of the cover closing switch (col. 7, lines 3-25 of **Ha et al.**) in a

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system such as taught by **Ha et al.** and **French** can be done either by direct continuous checking or by polling the status location for cover closing status without unexpected results.

12) In considering claim 22, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claim 21, plus the consideration of claim 12.

13) In considering claim 23, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claim 22, plus the consideration of claim 13.

14) In considering claim 24, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claim 23, plus the consideration of claim 14.

15) In considering claim 25, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claim 24, plus the consideration of claim 15.

16) In considering claim 26, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claim 25, plus the consideration of claim 16.

17) In considering claim 27, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claim 25, plus the consideration of claim 17.

18) In considering claim 28, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claim 24, plus the consideration of claim 18.

19) In considering claim 29, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claim 28, plus the consideration of claim 19.

20) In considering claim 30, **Ha et al.** and **French** made obvious all of the claimed subject matter as in the consideration of claim 28, plus the consideration of claim 20.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Scholder, US pat. #5,578,991

--A similar alarm system for a laptop computer.

2) Liptak, Jr. et al., US pat. #4,686,514

--A similar alarm system for computers.

3) Maman, US pat.#5,034,723

--A similar security system for electronic equipment (Fig. 6).

4) D'Angelo et al., US pat. #5,963,131

--A similar portable computer alarm with user alarm actuation.

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

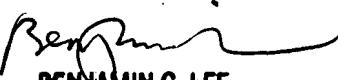
(703) 305-3988 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

7. Any inquiry concerning this communication should be directed to Examiner Benjamin Lee at telephone number (703) 305-0412. The examiner can normally be reached on Monday-Thursday, 6:00am-4:30pm. If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Hofsass, can be reached on (703) 305-4717.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-8576, Mon-Fri, 8:30am-5:00pm.


BENJAMIN C. LEE
PATENT EXAMINER
GROUP 2736

B.L.
September 11, 2000